

**Effect of Bintaro Biopesticide (*Cerbera odollam*) on the Intensity of Fall
armyworm Attacks (*Spodoptera frugiperda*) on Corn Plants**
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ABSTRACT

*The main pest in maize cultivation is the army caterpillar (*Spodoptera frugiperda*). *S. frugiperda* was able to reduce the yield of maize by 5-20%. To control *S. frugiperda* usually by using synthetic pesticides. However, continuous use can pollute the environment. Alternative control that can be done is biopesticide bintaro. The purpose of this study was to analyze the intensity of attacks caused by *S. frugiperda*. The research was carried out from June to September 2022 in two places, namely the Jember State Polytechnic Plant Protection Laboratory and the Tegalgede cultivation area, Jember (altitude 146 m asl and average daily air temperature 21⁰C to 34⁰C). Mortality tests were carried out with 6 concentration levels, namely 0%, 5%, 10%, 15%, 20% and 25%. Field test by comparing two treatments, namely 25% bintaro leaf biopesticide treatment and synthetic pesticide treatment (Metomyl 40%). The results showed that the intensity of plant damage was lower in the biopesticide treatment of bintaro leaf 9.5% than the synthetic pesticide treatment (metomyl 40%). This is because bintaro contains saponins, flavonoids and alkaloids which are toxic to fall armyworm and then cause death so that the population is reduced and the intensity of plant damage is also reduced.*

*Keywords : Bintaro Biopesticide, Corn, *Spodoptera frugiperda**